ART. II.—Contributions to Legal Medicine. By T. R. Beck, M. D., Professor of Medical Jurisprudence, Albany, New York.

CASE I. Pretended Delivery.—The following case was tried at the Ontario Circuit in the State of New York during the year (1840.) An action of ejectment, was brought by the widow of Oscar F. C., against two of his brothers, to recover a large and valuable farm. She claimed the farm in fee, as the heir at law, of a child, to which it was alleged, she gave birth after the death of her husband, but which died before the commencement of the suit, leaving her entitled, as heir, to the whole inheritance. The brothers claimed as heirs at law, admitting her right of dower, but denying her having given birth to a child.

It appeared by the testimony, that the plaintiff was married in July 1835, to O. F. C., he being then a ward in chancery, as an hal itual drunkard; that he died on the 6th of October, 1837, of delirium tremens, leaving no issue born during his life.

In proof of the birth of a posthumous child, Dr. K., a practising physician at Geneva, Mrs. K., the mother of the plaintiff, at whose house she was, and a sister of the plaintiff all testified that on the afternoon of the 17th of July, 1838, she gave birth to a female infant; that they were present and assisted at the birth; that the child lived about three weeks and then died and was interred in the burying ground of the C. family, on which occasion there was a large funeral attendance, a funcral sermon preached, and the plaintiff's family went into mourning. Mrs. L. a respectable female and near neighbour of that family also testified, that she was present, not at the very moment of the birth, but immediately thereafter; that she saw all the appearances usually observable on such occasions—received the new born infant from the arms of the physician, as he performed the last act of separation from the mother—that she washed and dressed it in the apparel that had been prepared, and placed it in the plaintiff's arms, she being by that time restored to her bed. Many witnesses testified that she nursed this child as long as its health continued, and when that began to fail, the doctor procured a puppy to supply its place at the breast. Much proof was also adduced of the appearance of the widow for months previous to her confinement.

For the defendants, it was stated, that the above testimony was in the main false and that the child was a supposititious one. In support of this, the following testimony was adduced.

A middle aged man was called, who testified that in 1838, and for several years previous, he was the captain of a canal boat, and that a young unmarried woman, who was the maid on board his boat, was discovered in the spring of 1838, to be pregnant, and as he had reason to believe, by himself; that having a family, and being desirous of concealing the transaction and at the same time of providing for her comfort, he applied to a friend in Geneva, to procure a suitable place for her during her confinement. This friend recommended him to Dr. K., and he accordingly saw him. He was asked

by Dr. K. when the child would probably be born, and upon being informed, that the birth might be expected in the carly part of July-he, the witness, was directed to call again on the following day. He did so, and the doctor then asked him, if he and the girl would be willing to part with the child after its birth, provided it could be well brought up and inherit a large property; that the doctor knew of a widow, whose husband had recently died and if she could have a child within nine months after his death, it would get a large estate. The name and residence of the widow were withheld. The witness partially consenting to the proposition, was requested to bring the girl to the doctor's office, which he did, and after some private conversation between her and the doctor, he left her there, under his assurance that she would be well provided for. Not being entirely satisfied that all was right, he ealled on the doctor some days afterwards and insisted upon being informed where the girl was, that he could obtain no information on the subject, and thercupon addressed a letter to her, inclosing some money, which was placed in the doctor's hands; that being still dissatisfied, he again ealled on the doctor, a few days afterwards and threatened to expose him unless he informed him where the girl was; the doctor left his office, and after a short absence, returned and directed him to a neighbouring house, which he understood to be the residence of old Mrs. K.—where he had an interview with the girl, and that he did not see her again until the latter part of July, 1838. He left her with the doctor about the middle of May. The witness also testified, that some time after, the girl was delivered of a child, and in the latter part of July, or the first of August in the same year, he had a conversation with the doctor, who stated to him that the ehild lived eight days, and that after its death, he buried it in the burying ground, about midnight.

The female referred to by the last witness, was next called and testified to her going to the office of Dr. K. That he told her in a private conversation, that if she would part with it as soon as born, he could make it heir to a large property, and have it brought up without any care on her part. She neither assented to, nor rejected this proposition. The doctor took her to the house of Mrs. K. where she remained until the 17th of July, when she gave birth to a child, which was immediately taken out of the room where she was, by a sister of the plaintiff, and that she had not seen it since; that the doctor, and mother, and sister of the plaintiff were present They had all told her that the ehild died immediately after it was born, and the doctor said he had buried it. She remained at Mrs. K.'s nine days after the birth of the child, when she was removed to a place, a few miles distant, provided for her by Mrs. K. While at Mrs. K.'s, she was kept in a room up stairs, without being permitted to go into the street, or look out of the window, or see any person except the family. She knew that the child was born alive, for it cried twice before it was taken out of the room, and she heard a child cry every day down stairs, after that, as long as she remained, but had not heard any thing of that kind previously. She was positive that her child was born during the afternoon of the 17th

of July.

Several witnesses also deposed that they had not observed any enlargement in the plaintiff until some time in the month of May.

To rebut this testimony, Dr. K. stated, that he had received the last witness, at the request of the captain, and obtained board for her at Mrs. K.'s because it was convenient to attend her at the same place where he was attending the plaintiff—that she had a male child there, and he was present

at its birth—but that it was born on the 19th of July, two days after the plaintiff was put to bed;—that the child died as soon as it was born, and he took it to his office and put it into a jar of spirits to preserve it, but the spirits not being strong enough, it "spoiled." 'The mother and sister of the plaintiff again corroborated the statement of the Dr. in all its particulars.

After a full and able argument by counsel, the case was committed to the jury, who in a few minutes returned a verdict in favour of the defendants.

The above narrative is taken from a newspaper report, but I have reason to believe that it is substantially correct. I have been informed by one of the counsel for the defendants, that a strong point against the physician was his inability to account for the remains of two children. Had he been able to designate any place where the second was to be found, search would instantly have been made for it.

Conceding that the verdict was just, it is easy to explain how Mrs. L. was called exactly at the moment when her testimony would prove available.

It is not among the least curions incidents in this case, that the mother of the child was subsequently well married, and that her husband was unaware of her previous condition, until the subpœna was served on her. On being informed of it, he consented and indeed insisted that she should obey the process of law and disclose the whole truth. The plaintiff and her friends probably came into court, with the idea that the circumstances relative to the girl were totally unknown to all, except themselves and the partices immediately concerned, and these last, they doubtless supposed, would not be desirous of exposing themselves. Such was, indeed, the fact, and the subpænas were actually issued, without being aware of how much importance, the testimony of the captain and the female might prove.

CASE II. Poisoning by Arsenic. Studden Death.—A melancholy instance of this description recently occurred in my own family. Some of the facts are deserving of record, and as the case will best be understood by a narrative of the attendant circumstances, I give these in detail:—

Harriet F. came on the 10th of March, 1840, as a chambermaid, with good recommendations. She was about 24 years old, a native of England, and a resident of this state some four or five years. Her conduct was unexceptionable, being but little given to visiting, and receiving very few visitors. About the middle of June, however, my attention was called to her appearance, and it immediately struck me as equivocal. I caused a private communication to be made to the female who had recommended her, of my suspicions of her pregnancy, but the idea was scouted as altogether impossible. Still, not feeling satisfied, and thinking it best to err on the safe side, I had her notified that I should have no further occasion for her services after the expiration of the month, viz., the 10th of July. She received this without any unpleasant feeling, saying that she had herself intended going into the country very shortly.

Nothing occurred until the 8th of July, two days previous to the above term, when about half past eight A. M., a female (who I afterwards learned had had a private interview with the maid in the kitchen,) desired to see me. She was extremely agitated—stated that she was a married woman—that

H. was pregnant by her husband, and that these parties were concerting a plan to elope together into the country—and finally requested me to detain the maid's elothes in order to prevent this. After some questioning, I declined doing this, saying, that if all this was so, I wished H. to leave as soon as possible, and certainly had no right to detain any of her property. With this she left me, threatening to send an express to the father of H. who resided some thirty miles in the country, and inform him of the above.

About half past ten, Harriet came up stairs, and stated to one of the family, that after the above scene, she did not think it right to remain, and asked whether there would be any objection to dismissing her. A ready consent was given and her wages handed to her. Immediately after this, she put on her hat and went out of the gate. The cook stated before the coroner's jury, that she could not have been absent more than ten minutes, and it is now ascertained that during that time she went to a druggist's near by, and purchased an ounce of arsenic. On her return, she went up the garden, and continued so long, that, in consequence of a friend calling to see her, she was sent for. This friend who had just become acquainted with the charges made by Mrs. D. urged her to leave, and that, if any thing was wrong, she would procure lodgings. She consented, and went into the bedroom for the purpose of packing up, and closed the door after her.

My family supposed that she had left, when at half past one o'clock, the cook sent up word, that Harriet was still down stairs quite ill, and that she had been vomiting and purging. I was shortly after sent for, and found her lying on the bed, apparently very drowsy, and unable to speak, except in unconnected sentences. On being asked what was the matter, she replied, "I don't know what you say," and repeated once or twice, "Oh! I shall die." My first impression, I confess was, that the agitation of the morning was about producing abortion, but on continued examination, I inclined to the suspicion of poison. The eyes were extremely bloodshot—she complained of scarcely any pain, and appeared rapidly sinking—although sensible when addressed. I requested the attendance of my friend, Dr. Wendell, but before he arrived, in answer to the earnest adjuration of one of the females with her, as to what she had been taking, she answered with difficulty "arsenic."

For a case so decidedly moribund, but little could be donc. It was too late to prepare the hydrated oxide of iron, and we therefore exhibited magnesia diffused in water, which she swallowed with great difficulty. An attempt to bleed her failed; the body was rubbed with stimulants, but she rapidly sunk and died without any convulsion or apparent pain, precisely at half past two o'clock.

No vestige of the purchased arsenic has been discovered up to this time, and the probability therefore certainly is, that she swallowed nearly the

whole, and that in the dry state.

An examination of the body was hardly practicable, in consequence both of the state of my family and the heat of the season. The coroner's jury were, however, fully satisfied of the existence of pregnancy, and this was probably advanced about six months.

The points of interest in this case, appear to me to be the following. 1st. We have the effects of arsenic in large quantity, uncontrolled by the interposition of any remedies; and the symptoms, so far as they can be ascertained, were copious vomiting and purging, which, however, ceased an hour, if not more, before death; but little pain; bloodshot eyes, the countenance

natural, and certainly not more suffused, than from the ordinary operation of an emetic; extreme faintness, without any thing that could exactly be called stupor; sinking, and the absence of convulsions. How strikingly these correspond with the appearances ordinarily observed in persons who have died within a few hours from the above cause, will be seen by referring to Christison on Poisons, third edition, p. 286, or Beck's Medical Jurisprudence, sixth edition, vol. ii, p. 371. 2d. The sudden fatality. It is not possible that more than four hours could have clapsed from the time of taking the poison to her dissolution, since she did not leave the house until half past ten. If she swallowed it while in the garden, (and this is the most probable,) it was somewhat within that time; if in the bed room, it could scarcely have exceeded three hours. I subjoin, for comparison, the cases collected by Christison and myself.

- Dr. Smith, New York Medical and Philosophical Journal, vol. iii, p.
  Eighteen hours. Dr. Christison says eight, but on referring to the original, the other will be found to be correct.
  - 2. Metzger. Christison, p. 287. A few hours.
- Dr. Christison, Edinburgh Medieo-Chirurgical Transactions, vol. ii, p.
  Five hours.
  - 4. London Medical Physical Journal, vol. xxxiv. Five hours.
  - 5. Dr. Gerard, Revue Médicale. Five hours and upwards.
  - 6. Orfila, Archives Générales. Nine hours.
  - 7. Mr. Holland, London Medical Gazette, vol. xv. Eight hours.
  - 8. Chaussier, Orfila's Toxicology. A few hours.
  - 9. Mr. Maeaulay, Christison, p. 289. Two hours.
  - 10. Mr. Wright, Laneet, vol. xvi. Four hours.
  - 11. Morgagni. Twelve hours.
  - 12. Laborde, Journal de Médeeinc. Nine hours.
  - 13. Dr. Gould, Boston Medical Magazine. Seventeen hours.
  - 14. Mr. Coates, London Medical Gazette, vol. xx. Four hours.
  - 15. Mr. Joseph Thompson, Lancet, No. 792. Six hours.
- 16. Mr. Pettigrew. See his life in the Medical Portrait Gallery. Seven hours.

In Mr. Wright's case, an ounce of arsenie was taken, in Mr. Coates' two ounces, and in Mr. Macaulay's Dr. Christison says, "the individual died with narcotic symptoms only, within two hours, after taking nearly a quarter of a pound of arsenie."

- Case III. Protracted Gestation.—I am indebted for the particulars of the following case, and the accompanying comments, to my friend James R. Manley, M.D., of New York, the physician in attendance.
- "Mr. and Mrs. G—— are Polish exiles of excellent education and morals, and highly esteemed among their aequaintances.
  - "Some time in February, 1840, Dr. Manlev was requested to take charge

of Mrs. G., as she expected to be confined about the 10th or 15th of April ensuing. She had previously been his patient having treated her for hæmoptysis. On the 7th of April, however, he was sent for to prescribe for another and violent attack of the same complaint. She was bled twice largely, kept on a low diet, absence from all stimuli, even light, &c., for about three weeks, in the hope that her daily expected confinement would be her chief security against the ordinary consequence of her disease, viz. consumption. The treatment was successful, the congh and hæmorrhage ceased, but the parturient effort was deferred until the 29th of May.

"As you may well suppose, this created much anxiety in the minds of her friends, whether viewed as a moral or physical question, and I became unusually interested in the result. On close inquiry, I satisfied myself of 1. Her husband had left her on business on the 13th of the following facts. July, 1839. 2. He did not return until the last of November. 3. During the first three months of pregnancy, she was twice unwell or menstruated, but as she was 39 years old, and had borne six children, and the amount was trifling, she, in place of deeming herself preguant, thought it furnished evidence of the approaching cessation of the function, and particularly as the ordinary accompaniments of previous pregnancies, viz. sick stomach, toothache, &c., were altogether wanting; but 4. On the 30th of November, she felt quickening, which, allowing four and a half months for the mean time of the appearance of that sign, made her reckoning for the 15th of April correct. 5. On the nights of the 12th and 13th of December, she was attacked with hemoptysis, for which I treated her by bloodletting and the negation of stimulants and nutrition, and was successful. sional hamorrhage continued however for nearly three weeks. 7th of April, as before observed, she was again seized and treated success-This was a violent attack, and the treatment was carried to a greater extent than before.

"About the 16th of April, having occasion to leave home, I put the patient under the care of my friend Dr. Duvall, in whom I could place the utmost confidence, believing that she would be confined every hour, as she complained of pains, which I presumed were premonitory, though not parturient. When I returned after an absence of three days, I found things as I had left them. She complained of much uneasiness in perinxo, and told me that Dr. D. had ordered an enema, which could not be administered from in ability to insert the pipe of the instrument; said that she was sitting upon the child—that if she got up and again sat down, she felt unpleasant, as if something was pressed upwards. About the first of May, so much anxiety was manifested by her friends, that without my knowledge, Dr. S. was requested to visit her, and after examining into her condition, was sufficiently satisfied to pronounce that she was not pregnant with a child, although she might have hydatids or a mole in utero. As soon as I was informed of this opinion, I lost no time in satisfying myself concerning

her condition. I made a thorough examination by auscultation and the sudden application of the cold hand to the abdomen. The result was such as could not deceive, and I pronounced her pregnant and near delivery, which might take place within two hours, as the head of the child rested, I may almost say, on the perinæum, and the os tincæ was dilated larger than a dollar. The head was so wedged, that every attempt to pass by the side of it, produced excessive pain, although the patient complained of nothing but pain in the pelvic region. This particular examination was made about the 6th or 8th of May. She continued in this state, enduring more or less pain every day, till the 29th, when she was happily delivered of a son weighing  $9\frac{\pi}{4}$  pounds.

"There was nothing peculiar in her parturition, except that it was a forchead presentation, and the eord was so convoluted, and entangled the child so much, as to leave but seven or eight inches of its length, being twice around the neck and once around the abdomen. When the waters burst, they came away with a great deal of meconium—ealculated to lead to the impression, that there were twins in utero, and that the membranes of each had ruptured, since it is, I apprehend, a very rare occurrence, to meet with the alvine fetal evacuations in cases of head presentations. The posterior fontanelle was obliterated, and the anterior was very small, not exceeding the size of a five cent piece. The child was remarkably strong, and the papillæ of what is denominated red gum, were in many places marked by yellow points, as is usual, when children are a week or more old. The labour was short, but excessively painful, by reason of the presentation, and the placenta was detached at the time of birth.

"The above recited ease presents an extraordinary exception to the general term of uterogestation, and if exceptions can impair the obligation of a general rule, this is one of such a peculiar character; as cannot fail to have its influence in modifying the opinions of the profession; as facts of this character are by far too serious in their consequences to be permitted to pass unnoticed. The laws respecting the legitimacy of offspring have by common consent settled upon a term of gestation considerably within the limit which this case presents, and this adds materially to its importance. Perhaps no facts can be better authenticated than those above stated. The character of the female is above suspicion; the simplicity of the account which she gave long before such a result could have been anticipated; her anxiety about the event, the opinion of a distinguished surgeon and accoucheur notwithstanding; all prove the sincerity of her expressed convictions, and render the detail peculiarly interesting.

"The reflections suggested by this case, naturally arrange themselves under two distinct divisions, which may be stated interrogatively thus:—First. Can diseases, or the treatment noeessary for their eure, have an influence in protracting the term of gestation? Secondly. May not protracted gestation be often confounded with protracted parturition, and be the cause of many

of those anomalies which the subject of gestation presents? We know that diseases have an influence in shortening this period, as we are frequently called to prescribe remedies with the single view of preventing abortions and miscarriages, and we treat them successfully even after the parturient pain has continued for a considerable time, and that, if need be, we persist in our remedial measures so long as the membranes continue entire, without reference to the condition of the uterus itself; and if medical treatment can arrest uterine action, after it has commenced in premature labour, may not the same treatment, used for other reasons, produce such a condition of the female system, as will delay the advent of a natural labour, after the contents of the uterus have attained their maturity, or after the period has arrived when the parturient effort would naturally be made. The usual term of gestation is 280 days, but children are frequently born, and live, or to use a significant phrase, they are viable if expelled at the end of thirty weeks, and thirty-five or thirty-six weeks is a period of gestation not unusual in cases of first pregnancies. Why the over-running of the usual term should be considered so extraordinary, when falling short of it is so common, more especially when the evidences of the infant's detention, are as apparent to the senses, as the evidences of premature birth, is only to be explained on the ground that law has settled the one on principles of policy, and left the other open, as it requires none of those legal safeguards which are presumed to be essential to the protection of hereditary property; and it is easier to conform our opinions to some settled rule, than be at pains to examine individual eases by data, which may or may not be received, where private interest or public prejudice, combine to admit or reject their application. respecting legitimacy of offspring, which limit gestation to 300 days, may be, and I doubt not are, wholesome ones in their operation: some bounds must be set; and the nearer they are fixed to the duration of the ordinary term, the greater is the security of public morals, since their extension would offer facilities to adulterous intercourse, which would be incompatible with the public welfare; nevertheless, it is as much an obligation of duty, as it is a dictate of humanity that the evidences upon which these anomalies rest should be carefully examined, that the stain of bastardy on the one hand, and the loss of reputation on the other may not unreasonably attach to the child or mother. The facts above stated in relation to Mrs. Gare as true as demonstration could make them, and by them, it appears that she carried her child 10 months and 13 days, but they admit of easy explanation, if we allow the treatment which was rendered necessary during her two attacks of hæmoptysis to have had any agency in suspending the process of feetal growth and uterine evolution; for after all is said, it is not certain that any other cause than the maturity of the fætus determines the natural period of gestation. The appearance of the child at birth; its size and weight: the obliteration of the posterior fontanelle, and the very small aperture of the anterior one; the appearance at birth of that peculiar eruption

denominated the red gum, (strophulus intertinctus,) and the matured character of it, for the vesicles were filled with an opaque yellow serum, all render it probable that the infant was detained in utero beyond the usual time.

"But it may be objected, that the explanation proves too much, since, on the assumption that the debilitating treatment of the pregnant woman prevented the child from attaining maturity in the ordinary period; it ought not to have presented any extraordinary appearance at the time of birth, and the exception is well taken, if the case was permitted to stand without additional evidence; that additional evidence may perhaps be found in the answer to the second interrogatory.

"I am not aware that any distinction has been attempted to be made between delayed, deferred, or protracted parturition and protracted gestation, neither does any appear necessary except for medico-legal precision, and it must be confessed that it is of the utmost consequence. Protracted parturition is a common occurrence, and from the nature of the case can scarcely pass unobserved; it is far otherwise, however, in protracted gestation. mencement of the one is well marked, whereas the other, under circumstances of married life, and by reason of the feeble and indistinct manner in which conception manifests itself, is only known by symptoms which have place after the lapse of many days. It is a law of being as constant as any other law which controls physical action, that labour should be a painful process, and the reasons for this are too obvious to require to be stated; nevertheless cases do not unfrequently occur, where the law appears to be Women have been known to be delivered of their children without experiencing any of the pains of the first stage of labour: they have been delivered, without any painful premonition, in the street, in carriages while proceeding from one place to another, in the porches of churches, nay, while sitting with their families at the dinner table, (a case of which occurred very lately in this city,) and every practitioner of midwifery with even limited experience must have witnessed cases in which delivery was accomplished by a single parturient effort. Now in these cases it is reasonable to suppose that the first stage of labour was attended by so little suffering, as to have escaped observation, and although the relaxation of the internal parts, the dilatation of the os uteri, and the contraction of its fundus and body are the work of time, it was accomplished even without the knowledge of the patient or the aeeoueheur. It has frequently happened in my own experience that a labour has commenced and progressed painfully till the pressure of the child was felt in perineo, when the pain has entirely subsided, and the patient experienced no uneasiness, except from pressure, for two, three, or four days, and in two recent instances, this condition continued a whole week, and when pain did reeur, the same effort which ruptured the momoranes, expelled the child. There is confessedly much variety in the character of labours, and seareely two are alike among twenty

consecutive cases. In the present instance I instituted no special examination, till I was informed that a surgeon had visited my patient and pronounced that she was not pregnant with a child.-It was early in May, that I made this examination and I found the os uteri much dilated and the head of the child resting in perineo: no labour pains had been felt, nor did pains of any kind which could be mistaken for labour occur till the morning of the 29th of May, about three weeks afterwards. The labour, however, was a painful one and continued five or six hours, which I attributed to the position in which the child presented. If the presentation had been of the vertex, I doubt not that she would have been confined in a short time and with little suffering: and I connot doubt, that but for the same cause, she would have been delivered three weeks before. In this event, neither her labour, nor her gestation would have had any extraordinary features, but would have passed, either entirely innoticed, or would have attracted very little attention." Yours sineerely,

JAMES R. MANLEY.

Dr. Theo. R. Beck. New York, September 18th, 1840.

Art. III.—Remarks upon Dyspepsia as connected with the Mind. By Austin Flint, M.D., of Buffalo, N. Y.

Having perused, in two of the late numbers of the American Journal of the Medical Sciences, the articles by Professor Chapman, with the attention and interest which the eminence of the author, and their intrinsic value claim, I may seem to expose myself to the charge of presumption in presenting the following remarks. It is, therefore, proper for me to state, that having for several years had occasion to study the symptoms of that form of gastrie derangement, known under the term dyspepsia, by means of personal sensations, I have, in consequence, been led to examine with peculiar interest other cases of an analogous character. This has led me to entertain some views respecting this affection which I do not recollect ever to have seen fully expressed, and which I have thought may possess some interest and importance. I offer this as an apology for a communication succeeding the publication of the articles above alluded to.

The characters of this disease derived from its influence upon the mind, have, of late years, received considerable attention. This branch of the subject, however, offers still ample scope for investigation. It is, in truth, a very important subject, considered with reference, not only to its pathological character, but also its moral, intellectual, and social relations.